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Circular

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Federal Statutory Protection for Mask Works

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INTRODUCTION

Under the Semiconductor Chip Protection Act of 1984, P.L. 98-620, chapter 9 of title 17, United States Code (U.S.C.), federal statutory protection is now available for mask works fixed in semiconductor chip products. The provisions of the Semiconductor Chip Protection Act, enacted by the 98th Congress and made effective as of November 8, 1984,* differ in many respects from the provisions of the Copyright Act, chapters 1-8 of title 17, U.S.C., in the type of protection provided. Although both laws are administered by the Copyright Office and involve protection of intellectual property, they differ from each other in many respects, including eligibility, ownership, term, scope and limitation of rights, remedies, and registration procedures. This circular provides information about registration of claims under the Semiconductor Chip Protection Act.

"MASK WORKS" AND "SEMICONDUCTOR CHIPS" DEFINED

Mask Works are defined in the Act as: a series of related images, however fixed or encoded (1) having or representing the predetermined three-dimensional pattern of metallic, insulating, or semiconductor material present or removed from the layers of a semiconductor chip product; and (2) in which series the relation of the images to one another is that each image has the pattern of the surface of one form of the semiconductor chip product.

The integrated circuits, better known as **semiconductor chips**, used to operate many consumer, medical, commercial, and industrial products and machinery, are defined in the Act as: the final or intermediate form of any product (1) having two or more layers of metallic, insulating, or semiconductor material, deposited or otherwise placed on or etched away or otherwise removed from a piece of semiconductor material in accordance with a predetermined pattern; and (2) intended to perform electronic circuitry functions.

*Note: While protection was effective from November 8, 1984, the Copyright Office did not begin registration of claims to protection until January 7, 1985, pursuant to 17 U.S.C., §913 (a).

PROTECTION OF MASK WORKS

Protection under the Act extends to the three-dimensional images or patterns formed on or in the layers of metallic, insulating, or semiconductor material and fixed in a semiconductor chip product, i.e., the "topography" of the "chip." Although these images or patterns are purely functional features, in contrast with copyright law they are nevertheless protected, provided that the particular mask work is neither dictated by a particular electronic function nor is one of only a few available design choices that will accomplish that function.

Protection under the Act does not extend to any idea or concept associated with a mask work. Just as ideas are not protected by copyright, no protection is available for any procedure, process, system, method of operation, concept, principle or discovery associated with a mask work, regardless of the form in which it is described, explained, illustrated, or embodied in a mask work. (17 U.S.C. §902 (c))

Originality

To be protected under the Act, a mask work must be original. The Report of the Committee of the Judiciary of the House of Representatives[1] provides that a mask work is "original" if it is the independent creation of an author who did not copy it.

The mask work may not consist solely of designs that are staple, commonplace or familiar in the semiconductor industry, or variations of such designs, combined in a way that, considered as a whole, are not original. (17 U.S.C. §902 (b))

National Origin

Any original mask work fixed in a semiconductor chip product by or under the authority of the mask work owner is eligible for protection if:

1. on the date the mask work is registered with the Copyright Office or the date the mask work is first commercially exploited anywhere in the world, whichever occurs first, **the owner of the mask work** is:
   - a national or domiciliary of the United States; or
   - a national, domiciliary or sovereign authority of a foreign nation that is a party with the United States to a

[1]House Report No. 98-781, 98th Cong. 2d Sess. 4 (1984), p. 17.

treaty affording protection to mask works; or
- a stateless person; or

2. the mask work is first commercially exploited in the United States; or
3. the mask work comes within the scope of a Presidential proclamation extending protection to mask works of nationals and domiciliaries of a foreign country and to works first commercially exploited in that country, on the basis of a finding that mask works protected by the Semiconductor Chip Protection Act are also protected in the particular foreign country, either under the principle of reciprocity or under the principle of national treatment.

NOTE: Under a special transitional section, the Secretary of Commerce may issue an order extending protection to mask works of foreign nationals, domiciliaries, and sovereign authorities and to mask works first commercially exploited in a particular country, provided that 1) the foreign country is making good faith efforts and reasonable progress toward a treaty with the United States or toward enactment of legislation protecting United States mask works; 2) the country is not engaging in piracy of mask works; and 3) issuance of the order would promote the purposes of the Act and interests of international comity. The Secretary's authority terminates 3 years after the date of enactment, but mask work claims registered pursuant to an order of the Secretary remain valid for the normal 10-year period of protection, if otherwise valid. For guidelines governing the submission of requests for issuance of an order by the Secretary, contact the U.S. Patent and Trademark Office, Washington, D.C. 20231.

REGISTRATION OF MASK WORKS

Registration Mandatory to Secure Protection

In order to secure protection, owners of mask works must apply for registration of their claims with the Copyright Office. Moreover, owners of mask works must register their works within **2 years** after the date on which the mask work is first commercially exploited, or the opportunity to secure protection under the Act will be lost.

The effective date of registration of a claim to protection in a mask work will be the date on which an acceptable application, deposit of identifying material, and appropriate fee are received in the Copyright Office.

Note: Retroactivity to July 1, 1983

Protection is available to a mask work first commercially exploited on or after July 1, 1983, and before the effective date of the Act if a claim in the mask work was registered with the Copyright Office before July 1, 1985. However, infringing chip product units manufactured before the date of enactment may be imported and distributed for 2 years after registration of such a mask work, if the importer or distributor pays or offers to pay a reasonable royalty.

Importance of Certificate of Registration

The Act further provides that a certificate of registration for a mask work issued by the Copyright Office constitutes prima facie evidence of the facts stated in the certificate and that the applicant issued the certificate has met the requirements for protection.

After a certificate has been issued by the Copyright Office, the owner of the mask work or the exclusive licensee of all rights in the mask work may institute a civil action for infringement occurring after the commencement of protection accorded by the Act.

TERM OF PROTECTION

Protection for a mask work begins on the date the mask work is registered with the Copyright Office, or the date the mask work is first commercially exploited anywhere in the world, whichever occurs first. Protection lasts for **10 years** (terminating at the end of the tenth calendar year after it began).

NOTE: To **"commercially exploit"** a mask work is defined in the Act as the distribution to the public for commercial purposes of a semiconductor chip product embodying the mask work, with the provision that the term includes an offer to sell or transfer a semiconductor chip product only when the offer is in writing and occurs after the mask work is fixed in the semiconductor chip product.

EXCLUSIVE RIGHTS OF AN OWNER: LIMITATIONS AND TRANSFERS

During the term of protection, the owner of a mask work has the following exclusive rights:

1. to reproduce the mask work by optical, electronic, or

any other means;
2. to import or distribute a semiconductor chip product in which the mask work is embodied;
3. to induce or knowingly to cause another person to do any of the acts described in number 1 and number 2.

Limitations on Rights

The Act permits **reverse engineering** of a mask work solely for the purposes of teaching, analyzing, or evaluating the concepts or techniques embodied in the mask work or in the circuitry, logic flow, or organization of components used in the mask work. The person who performs legitimate reverse engineering may incorporate the results in an original mask work which is made to be distributed.

NOTE: House Report 98-781[2] refers to the "paper trail" evidencing the extensive effort involved in legitimate reverse engineering and states that reverse engineering is an affirmative defense to an infringement claim.

Purchasers also obtain a right arising from the **first sale** of semiconductor chips. The Act specifies that purchasers of semiconductor chip products have the right to use and resell them freely but not to reproduce them without the permission of the owner of the mask work embodied in the semiconductor chip product.

Transfer of Rights

The Act allows the owner of the exclusive rights to transfer all of them or to license all or fewer than all the rights. A transfer or license must be in writing and signed by the owner of the rights or by a duly authorized agent of the owner. The Act also provides that the exclusive rights in a mask work may be transferred by operation of law or by terms of a will; or, the rights may pass as personal property under the applicable state law of intestate succession.

For information on the recordation of documents of transfer in the Copyright Office, see p.5 of this circular.

MASK WORKS CREATED BY EMPLOYEES OF THE U.S. GOVERNMENT

Federal protection under the Semiconductor Chip Protection Act is not available for any mask work of the United States government, that is, any mask works created by United States government employees as part of their official duties.

HOW TO APPLY FOR REGISTRATION OF MASK WORKS

To apply for registration of a mask work, send the following to the Copyright Office:
1. a completed Form MW;
2. a nonrefundable $20.00 filing fee; and,
3. the appropriate identifying material (deposit).

Send the application, fee, and deposit **in the same package** to:

Department MW
Library of Congress
Washington, D.C. 20540

You can obtain Form MW free of charge by sending a specific request, identifying the number of forms you need, to:

Information Section, LM-401
Copyright Office
Library of Congress
Washington, D.C. 20559

or by calling the Forms Hotline (202) 287-9100 and leaving a recorded request for forms.

DEPOSIT OF IDENTIFYING MATERIAL

The Act gives the Register of Copyrights broad, general authority to specify the identifying material to be deposited in connection with the claim for registration. In recognition of the public representations of a need to preserve trade secret protection or avoid public disclosure of sensitive information embodied in various identifying materials, the regulations of the Copyright Office provide different deposit options, depending upon whether the mask work has been commercially exploited. The Copyright Office encourages the fullest disclosure of the mask work within the deposit options established by the regulation.

For commercially exploited mask works, the identifying material shall consist of the following:
1. Four chips (dies) as first commercially exploited; and
2. One full set of visually perceptible reproductions of each layer of the mask work. The applicant may elect

[2]House Report No. 98-781, 98th Cong., 2d Sess. 4 (1984), p. 21.

to deposit either plastic color overlays, composite plots, or photographs of the layers of the mask work.

For mask works that have not been commercially exploited, the identifying material shall consist of:

One full set of either plastic color overlays or composite plots of each layer of the semiconductor chip product. Although no chips (dies) need to be sent, the applicant may elect to deposit four reproductions of the most complete form as fixed in a chip product.

The visually perceptible materials shall be reproduced at a magnification sufficient to reveal the basic design of the mask work, and shall be at least 20 times the magnification of the actual size. They must be readily storable in an 8½ x 11-inch format. Titles should be placed on all identifying materials so that applications and deposit materials can be matched.

REGISTRATION IN MOST COMPLETE FORM

Owners seeking registration of a mask work must submit the entire original mask work in its most complete form as fixed in a semiconductor chip product. The most complete form means the stage of the manufacturing process which is closest to completion.

FULL DISCLOSURE REQUIREMENT FOR REGISTRATION OF LESS THAN 20 PERCENT OF INTENDED FINAL FORM

Where the mask work in which registration is sought represents less than 20 percent of the area of the intended final form of the chip product, the deposit must consist of a visually perceptible representation of the work which reveals the totality of the mask work contribution to a person trained in the state of the art. The representation may consist of any combination of plastic color overlay sheets, drawings or plots in composite form, or a photograph(s) of the entire mask set. Additional explanatory material may accompany the visually perceptible representation if needed, to identify all of the elements in the mask work contribution.

DEPOSIT FOR TRADE SECRET PROTECTION

Where an applicant makes a claim of trade secret protection or a need to protect sensitive information, certain material may be withheld from the deposit of identifying material. Below is an outline of the deposit options.

Mask Works Commercially Exploited

1. Four chips as first commercially exploited; and
2. Special "identifying portions" (defined below) for no more than two of each five layers of the mask work in which trade secrecy is claimed; and
3. Color overlays, plots, or photographs for all other layers.

Mask Works Not Commercially Exploited

1. Special "identifying portions" (defined below) for any layer or layers in which trade secrecy is claimed; and
2. A single photograph of the top or other visible layers of the mask work with the sensitive information maintained under a claim of trade secrecy blocked out, provided the blocked out portions do not exceed the remaining portions.

Identifying Portions

The "identifying portions" shall consist of a printout of the mask work design data pertaining to each withheld layer, reproduced in microform, *or* visually perceptible representations (plastic color overlays, composite plots, *or,* in the case of commercially exploited mask works, photographs of the masks) in which portions maintained under a claim of trade secrecy are blocked out, provided that the portions remaining are greater than the portions blocked out. For mask works not commercially exploited, sensitive information may be blocked out from the design data, provided that the portions remaining are greater than the portions blocked out.

SPECIAL RELIEF

The Register of Copyrights, on a case by case basis, may decide to grant special relief from the deposit requirements. Requests for special relief must be made in writing, and must set forth the specific reasons why the request should be granted. Also, they should generally propose an alternative form of deposit. Requests should be addressed to: **Chief, Examining Division, Copyright Office, Washington, D.C. 20559.**

FEE

The nonrefundable filing fee for an application for registration of a claim to protection in a mask work is $20.00 (check, money order, or bankdraft, not cash) payable to: Register of Copyrights.

SPECIAL HANDLING

Special handling of an application for registration of a claim to protection in a mask work is granted at the discretion of the Register of Copyrights in a limited number of cases involving pending or prospective litigation or contract deadlines. The fee for special handling is $200.00, in addition to the $20.00 filing fee. Payment must be in the form of a certified check, cashier's check, or money order.

Requests for special handling may be made in person in the **Public Information Office, LM-401,** or by mail. A special handling form or a letter containing answers to the following questions is required. Why is there an urgent need for special handling? If it's because of litigation, is the litigation actual or prospective? Are you or your client the plaintiff or defendant? What are the names of the parties and the name of the court where the action is pending or expected? It is also necessary to certify that the answers to these questions are correct to the best of your knowledge. Mailed requests and any later correspondence concerning a special handling application should be sent to: **Library of Congress, Department D.S., Washington, D.C. 20540, Attention: Receiving and Processing Division Office.**

The outside of the envelope and the letter inside should clearly indicate that it is a request for special handling. The request must be accompanied by a completed application, the required deposit material, and the required fees.

NOTICE

The owner of a mask work protected under the Semiconductor Chip Protection Act may affix a notice of ownership to mask works, to masks, and to semiconductor chip products embodying the mask work in a manner and location which gives reasonable notice of the claim to protection.

The Act requires the form of the notice to be:

1. the words **mask work,** the symbol "M" or the symbol Ⓜ; **and**
2. the name of the owner(s) of the rights in the mask work or an abbreviation by which the name is recognized or is generally known.

Affixation of such a notice is optional and is not a condition of protection but the notice does constitute prima facie evidence of notice of protection. The Register of Copyrights shall prescribe by regulation, as examples, specific methods of affixation and positions of the notice.

PUBLIC ACCESS TO IN-PROCESS FILES

In-process files are those which the Copyright Office makes for its own immediate internal use in connection with pending applications for registration or the recordation of documents, and which are preliminary to the completion of the public record.

There is no direct access by the public to in-process files and any of the areas where they are kept. Likewise, direct public use of computer terminals intended to access the automated equivalent of these files is not permitted.

Requests for certain information contained in the in-process files may be obtained by anyone, following payment of applicable fees, upon request to the Information and Reference Division.

PUBLIC ACCESS TO DOCUMENT RECORDS

Requests for copies of records or deposits should be addressed to the **Certifications and Documents Section, LM-402, Copyright Office, Library of Congress, Washington, D.C. 20559, (202) 287-6787.**

Copying of completed records and indexes relating to a registration of a recorded document, or identifying material deposited in connection with a completed registration may be undertaken in the Certifications and Documents Section. Since some of the materials are not stored on the immediate premises of the Copyright Office, it is advisable to consult with the Certifications and Documents Section to determine the length of time necessary to reproduce the required materials.

Requests for searches of the catalogs and indexes of the Copyright Office should be addressed to the **Reference and Bibliography Section, LM-450, Copyright Office, Library of Congress, Washington, D.C. 20559, (202) 287-6850.**

RECORDATION

Any transfer of ownership or other document pertaining to a mask work may be recorded in the Copyright Office if the document filed for recordation is accompanied by the appropriate fee and it meets the following requirements:

1. The document must bear the actual signature or signatures of the person or persons who executed (signed) the document. Or, if a photocopy of the original signed document is submitted, it must be accompanied by a sworn or official certification. The certification must state that the attached reproduction is a true copy of the original signed document.
2. The document must be complete by its own terms, that is, a document which contains a reference to any schedule, appendix, exhibit, addendum, or other material as being attached or made a part of it, is generally recordable only if the attachment is submitted for recordation with the document; and
3. The document must be legible and capable of being reproduced on microfilm.
4. A fee which shall be computed as follows:
   a. For a document of six pages or less, covering no more than one title, $10;
   b. For each page over six and each title over one, 50 cents additional.

The Copyright Office, upon receipt of the acceptable document and fee, shall record the document and return it with a certificate of recordation.

Please send documents to be recorded to:

Documents Unit, LM-462
Cataloging Division
Copyright Office
Library of Cor ess
Washington, D.C. 20559

FOR MORE INFORMATION

To obtain further information, write or call the Public Information Office, Copyright Office, Library of Congress, Washington, D.C. 20559, (202) 287-8700. To obtain Form MW, call the Forms Hotline, (202) 287-9100.

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